

ABSTRACT OF THE DISCLOSURE

The apparatus controls a tilt angle of a tilt mirror
5 in high speed with high stability, realizing non-linearity
compensation. The apparatus includes: a control signal
producing unit, which produces a control signal, for
feed-forward controlling of the mirror into a target tilt
angle, based on a parameter that determines the target tilt
10 angle; a digital filter for removing a resonance frequency
component, which is caused by an angle response of the tilt
mirror, in the control signal, which is produced by the control
signal producing unit; and a square root calculating unit
for performing digital square-root calculation so that
15 non-linearity of the control signal, from which the resonance
frequency component has been removed, is compensated for.